Self-Protection and Growth as the Motivational Force behind Majority Group Members' Cultural Adaptation and Discrimination: A Parallel Mediation Model via Intergroup Contact and Threat

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Katharina Lefringhausen was responsible for the research design, data collection and analysis, drafting the article and revising it critically for important intellectual content.

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Tara C. Marshall supported the research design and revised the manuscript critically for important intellectual content.

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Abstract

What motivates majority group members to adapt to or reject cultural diversity? Considering the relevance of personal values on our attitudes and behaviors, we inspected how self-protection and growth predict levels of discriminatory behavioral and cultural adaptation intentions towards migrants via intergroup contact and perceived intergroup threats, simultaneously (i.e., parallel mediation). Specifically, positive contact between groups is known for reducing prejudice through diminishing perceived intergroup threats. Yet current research emphasizes the role of individual differences in this interplay whilst proposing a parallel relationship between perceived intergroup threats and contact. Also by inspecting cultural adaptation and discriminatory behavioral intentions, the present study examined more proximal indicators of real-world intergroup behaviors than explored in past research. Using data from 304 US Americans, structural equation modelling indicated a good fit for a parallel mediation model with growth relating positively to cultural adaptation intentions and negatively to discriminatory behavioral intentions through being positively associated with intergroup contact and negatively with perceived intergroup threats, simultaneously. The reverse was found for self-protection. These findings stress that personal values constitute a relevant individual difference in the contact/threats-outcome relationship, providing a motivational explanation for majority group members' experience of cultural diversity in their own country.

Keywords: values, intergroup threat, intergroup contact, acculturation, majority group

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The relationship between cultural majority groups (e.g., US Americans) with cultural minority groups (e.g., migrants) remains a controversial topic across the world, and particularly in the USA. Indeed, whilst hate crimes against cultural minorities are on the rise (FBI.gov, 2016), the US population is projected to no longer consist of one but multiple cultural majority groups by 2055 (Cohn & Caumont, 2016). But why do some US Americans culturally adapt towards migrants' cultures – for example, by endorsing their cultural values (Lefringhausen & Marshall, 2016) – whilst others express discriminatory behaviors?

Decades of research stress that positive intergroup contact is one of the most effective situational approaches for reducing prejudice even beyond the direct contact partner and situations so that negative attitudes diminish towards the whole outgroup (Allport, 1954; Pettigrew & Tropp, 2006). Thereby it also encourages majority group members to endorse multiculturalism as an intergroup ideology (Callens, Meuleman & Valentova, 2019) and host culture adoption by persons with a migration background (i.e., migrants and children of migrants; Sixtus, Wesche, & Kerschreiter, 2019). Especially the reduction of perceived intergroup threat is often conceptualized as an explanatory variable for this effect (Stephan, Ybarra, & Morrison, 2009). Notably, intergroup contact can be differentiated into quantitative (e.g., contact frequency in the neighborhood) and qualitative contact (e.g., intergroup friendships). Both forms relate negatively to prejudice, and thus, they are often combined to indicate an overall tendency towards contact (e.g., Asbrock, Christ, Duckitt, & Sibley 2012).

However, the positive effect of contact does not work to the same degree across all individuals (for an overview, see Hodson, Turner, & Choma, 2017). Thus, a better

understanding of what types of individual differences are relevant for the contact-prejudice relationship is crucial for contact interventions. Moreover, Abrams and Eller (2017) question whether intergroup threat always constitutes a mediator of the contact-prejudice relationship or whether it may function parallel to intergroup contact, too. Thus, we followed and expanded the call by Hodson and colleagues (2017) by a) examining the higher order values *self-protection* and *growth* (Schwartz et al., 2012) as relevant individual differences for prejudice that b) predict 304 US Americans' discriminatory behavioral intentions (i.e., blatant prejudice) and the degree to which they intend to adapt to migrants' cultures – as more proximal indicators for real-world intergroup behaviors – through c) a parallel mediation model via intergroup contact and threat.

Contact and Individual Differences

A recently growing body of research examines the role of individual differences that are strong direct predictors of prejudice on the contact-prejudice relationship (Hodson et al., 2017; Kteily, Hodson, Dhont, & Ho, 2019). In particular, these include the social attitudes of right-wing authoritarianism (RWA, i.e., submission to authority and preference for tradition; Altemeyer, 1998) and social dominance orientation (SDO, i.e., preference for hierarchy within society and social groups; Sidanius & Pratto, 1999; e.g., Asbrock et al., 2012; Duckitt, 2001) as well as personality traits (e.g., Korol, 2017; Turner, Hewstone, Prestwich, & Vonofakou, 2014). For example, the dual-process module postulates that personality traits represent motivational goals expressed via RWA and SDO, which in turn influence prejudice (Duckitt, 2001). This led Asbrock and colleagues (2012) to propose that RWA and SDO moderate the relationship between intergroup contact and threats, which in turn should predict prejudice. They supported this claim with longitudinal data from a German sample.

In opposition to social attitudes that function as moderators of the contact-prejudice relationship, other forms of individual differences are conceptualized as its antecedent. For

example, Jackson and Poulsen (2005) based their work on the assumption that people tend to enter (situational selection; Ickes, Snyder, & Garcia, 1997) and positively participate in situations (situational evocation; Buss, 1989) that are most conducive to the expression of their personal traits. Indeed, open and agreeable White US American students were more likely to initiate intergroup contact and interpret contact experiences favorably, which led to more positive outgroup attitudes (see also Korol, 2017). Similarly, Turner and colleagues (2014) discovered in their second study that extroversion predicted outgroup attitudes through a higher number of cross-group friendships (mediator 1), which in turn, reduced intergroup anxiety (mediator 2). Statistically speaking, these are identical approaches; yet conceptually, it shifts the focus from intergroup contact as the underlying motivational basis for prejudice to individual differences (Hodson et al., 2017). As outlined in the following section, we propose to consider personal values as such a motivational basis.

Growth and Self-Protection Values

Values are desirable trans-situational goals that serve as guiding principles in people's lives, influencing the selection and evaluation of behaviors and events (Schwartz, 1992). In opposition to social attitudes, which refer to specific actions, events or objects, values like personality traits, are fairly stable components of the self (Schwartz et al., 2012) and strongly intercorrelated with personality traits (Fischer & Boer, 2015). Hence, Cohrs, Moschner, Maes, and Kielmann (2005) tested values as alternative motivational dynamics to personality traits (cf., Duckitt, 2001) underlying RWA and SDO and their relation with prejudice, which was supported in a large German sample.

Specifically, the motivational theory of basic human values (Schwartz, 1992; Schwartz et al., 2012) proposes 10 and more recently 19 individual values that can be arranged in a circular continuum in which adjacent values share compatible motivations whilst distant values are more conflictual. More adjunct values can therefore be summarized

as higher order values: openness to change (independence of thought, action, and readiness for change) versus conservation (order, self-restriction, and resistance to change) as well as self-transcendence (concern for the welfare of others) versus self-enhancement (pursuit of one's own interests and dominance over others; for a detailed description of the individual values, please see Schwartz et al., 2012, pp. 664-669). Notably, the same motivational compatibilities that structure value relations (e.g., in form of higher order values) largely organize relations among value-expressive behaviors.

Recently, Schwartz and colleagues (2012; Rudnev, Magun, & Schwartz, 2018) stressed in their refined value theory that self-transcendence and openness to change express *growth* motivated values, opposing self-enhancement and conservation, which express *self-protection* motivated values. To our knowledge, the role of *growth* and *self-protection* as higher order values has not yet been explicitly explored in relation to the contact-prejudice relationship. Yet they align with Leong's (2008) conceptual model of two oppositional acculturation experiences by majority group members – that is, the invasion experience grounds in threat related perceptions and a sense of cultural and economic encroachment, corresponding to s*elf-protection*; in contrast, the enrichment experience reflects the perception of cultural diversity as a benefit, being stimulating and inspiring, corresponding to *growth*. In fact, Feather and McKee (2008) reported that *self-protection* motivated values enhanced anti-Aboriginal prejudice among Australians, whilst self-transcendence (a *growth* motivated higher order value) reduced it. Similarly, *self-protection* motivated values strengthened the support of Spaniards for police violence towards migrants whilst *growth* motivated values diminished it (Álvaro et al., 2015). Meanwhile, Italian University students high in *growth* motivated values preferred migrants to integrate (i.e. maintaining their heritage culture whilst adopting the host culture) and even accepted to change aspects of their own culture to facilitate migrants' integration (integrationism–transformation; Sapienza,

Hichy, Guarnera, & Di Nuovo, 2010). Conversely, *self-protection* motivated values discouraged these orientations. Lastly, Strauss, Sawyerr, and Oke (2008) reported that British citizens high in *self-protection* motivated values reduced universal-diverse orientation (UDO) whereas those high in *growth* motivated values endorsed them.

Discriminatory Behavioral and Cultural Adaptation Intentions

Whilst past research often explored the relationship of intergroup contact with the affective and cognitive components of outgroup attitudes, some researchers stress the necessity of examining behavioral tendencies, which constitute more proximal indicators of real-world intergroup behaviors (e.g., Dhont, Roets, & Van Hiel, 2011). Discriminatory behavioral intentions (DBI), as an indicator of a blatant form of prejudice, is such a behavioral tendency measure – that is, whilst subtle prejudice is expressed through indirect and distant discriminatory behaviors, blatant prejudice refers to direct hostility and expression of superiority towards outgroups (Pettigrew & Meertens, 1995). In line with the reported findings of values and negative outgroup attitudes, we expected that *self-protection* will positively and *growth* negatively associate with DBI.

Meanwhile, the theory of acculturation entails that if members of different cultural backgrounds come into sustained first hand contact, they may experience changes in their values, behaviors, and identities (Redfield, Linton, & Herskovits, 1936). Berry's (1997) well-known bidimensional acculturation model proposes that migrants can maintain their heritage culture and/or adopt the host culture. Lefringhausen and Marshall (2016; see also Haugen & Kunst, 2017) revealed that two dimensions of cultural maintenance and adaptation also apply to majority group members, indicating the extent to which they *themselves* change towards migrants' cultures in terms of *their* endorsed values, identity, and behavior. In line with the reported value relations with positive outgroup attitudes, we expected that *growth* will positively and *self-protection* negatively associate with cultural adaptation intentions (CAI).

Contact and Intergroup Threat as Parallel Mediators

In contrast to research on intergroup contact, the Integrated Threat Theory (ITT; Stephan et al., 2009) holds that higher levels of perceived threat can encourage prejudice towards outgroup members whilst hindering favorable outgroup attitudes (e.g., Callens et al., 2019; Ward & Masgoret, 2008). Realistic threats refer to the perception of intergroup competition over limited resources, conflicting goals, and threats to the economic and physical welfare of the in-group. Symbolic threats emerge from perceived conflictual values, ideologies, and beliefs between the in- and outgroup(s). Riek, Mania, and Gaertner (2006) meta-analytic summary of various threat types supports the ITT.

Yet, the interplay between intergroup contact and threat is not clear. ITT (Stephan et al., 2009) postulated that perceived threat acts as a mediator between the contact-prejudice relationships. For example, Aberson's (2016) meta-analysis supported the mediating role of symbolic and realistic threats across several factors (i.e., qualitative and/or quantitative contact; type and target of prejudice). However, Stephan and Stephan (2017) themselves stress the reciprocal relationship between causes and consequences of threat. Similarly, Abrams and Eller (2017) propose that intergroup contact and threat vary over time, and thus, each temporal level provides the potential context of the next encounter, resulting in their potential function as parallel predictors of prejudice.

The Present Study

In line with Abrams and Eller's (2017) Temporally Integrated Model of Intergroup Contact and Threat (TIMICAT), we propose that intergroup contact and threat may function as parallel mediators between personal values and DBI/CAI (Hypothesis 1, see Figure 1). In so doing, we go beyond previous work on social attitudes and personality traits by not only considering *growth* and *self-protection* as relevant higher order values that predict intergroup relations but also by questioning the traditional positioning of intergroup threat as a mediator

between contact and outgroup attitudes. In fact, we could only allocate three studies that even considered the interplay of individual differences with intergroup contact and threat in relation to outgroup attitudes (Asbrock et al., 2012; Dhont et al., 2011; Turner et al., 2014).

Specifically, we expected that people high in *growth* will be more likely to seek out favorable intergroup contact experiences and to act in a way that facilitates favorable interactions whilst being less likely to perceive outgroups' existence as a threat, which in turn relates negatively to DBI and positively to CAI (Hypothesis 2). Simultaneously, we expected that individuals high in *self-protection* perceive intergroup contact as a challenge to the established social rules and the legitimization of hierarchical relations, making them less likely to seek and facilitate favorable intergroup contact whilst being more likely to perceive outgroups' existence as a threat, which in turn relates positively to DBI and negatively to CAI (Hypothesis 3).

This is because *growth* motivates an interest in societal change and appreciation of novelties whilst *self-protection* stresses the preference for societal stability through the preservation of existing norms and power relations (Schwartz, 1992). Sagiv and Schwartz (1995), for example, found that mainly g*rowth* motivated values encouraged and several *self-protection* motivated values reduced Israeli Jewish teachers' readiness for social contact with Israeli Arabs. Similarly, *self-protection* motivated values diminish and *growth* motivated values foster the UDO subcomponent of seeking contact with diverse others (Strauss et al., 2008). Meanwhile, Stephan and colleagues (2009) argued that *self-protection* motivated values encourage the perception of intergroup threat, although, to our knowledge, this relationship has not been directly examined. Yet some evidence is provided by Matthews and Levin (2012) who reported that US Americans' SDO and RWA, with both positively relating to *self-protection* motivated values and negatively to *growth* motivated values (Cohrs et al., 2005), positively correlated with realistic and symbolic threats.

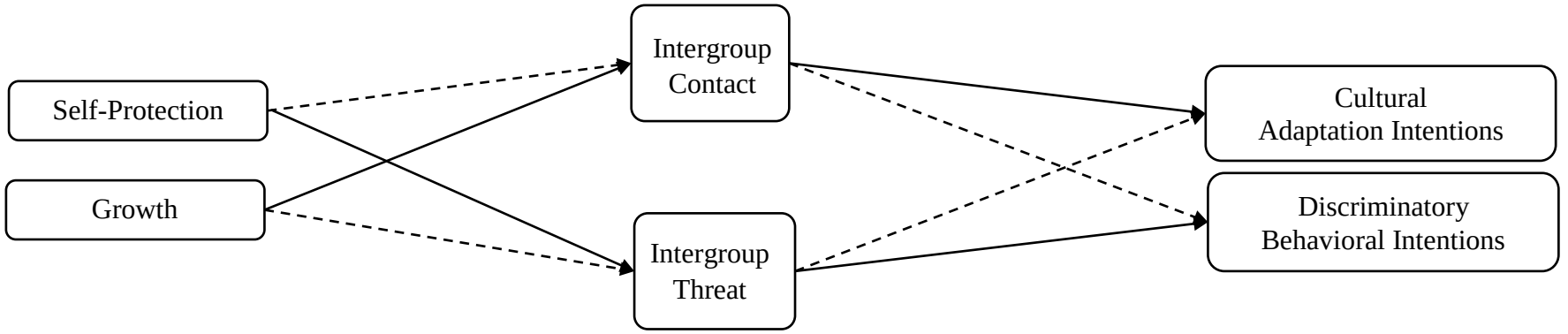

Figure 1. A straight line indicates an expected positive relationship. A dashed line indicates an expected negative relationship.

Method

Participants and Procedure

All participants had to identify themselves as a member of the mainstream society, they were born in the USA, had US citizenship as did both parents and grandparents, they had no personal migration experience and considered English to be their primary language. 304 US Americans completed the survey who were mostly female (62%) and employed (68%; Not Employed = 18%, Student = 14%). Participants ranged between the age of 19 and 73 (*M* = 37.13, *SD* = 12.66) and most identified as White/Caucasian (84%). Data was collected via Amazon MTurk in 2014 with participants receiving .50 USD upon completion of the study. Cronbach's alpha coefficients for the scales are reported in Table 1. All materials are available online (Author, 2019, July 1).

Materials

Growth and Self-Protection. For the 21-item Portrait Value Questionnaire (Schwartz, 2003), participants read vignettes which described values and rated how similar they perceived themselves to the hypothetical person described in each 'portrait'. Participants indicated their opinions on a 6-point Likert scale (1 = *would not appreciate them at all*, 6 = *would appreciate them very much*). We followed Rudnev and colleagues procedure (2018) and employed values of self-transcendence and openness to change were combined to create a *growth* variable (11-items; e.g., "He/She strongly believes that people should care for nature. Looking after the environment is important to him/her.") whilst self-enhancement and conservation values were combined to create a *self-protection* variable (10-items; e.g., "It is important to him/her to always behave properly. He/She wants to avoid doing anything people would say is wrong.").

Intergroup Contact. To assess the overall level of intergroup contact experience, we used two scales: on a 5-point Likert scale ranging from "*never"* (1) to "*every day"* (5), participants indicated their level of intercultural contact across life domains (3-items; Ward & Masgoret, 2008), asking "How often do you interact with migrants in your workplace/social life/neighbourhood?"; and on a 7-point Likert scale (1 = s*trongly disagree,* 7 = s*trongly agree*), participants indicated their level of positive previous contacts with migrants, including items such as "I have had many positive experiences with migrants." (3-items; Social Interactions Questionnaire; Plant, Butz, & Tartakovsky, 2008). We combined these two scales by converting quantity of contact from a 5-point to a 7-point Likert scale using a proportional transformation method.

Intergroup Threat. The overall level of perceived intergroup threat was measured via the modified version of the Stephan et al. (1999) 7-item symbolic threat and 7-item realistic threat questionnaire (as cited in Schweitzer, Perkoulidis, Krome, Ludlow, & Ryan, 2005). Participants were asked to indicate their response on a 10-point Likert scale from "*strongly disagree*" (1) to "*strongly agree*" (10). Items included "Migrants are undermining our culture" (symbolic threat), and "Migrants have increased the tax burden on locals" (realistic threat).

Cultural Adaptation Intentions. Rewording the items of the Multi-Vancouver Index of Acculturation validated by Lefringhausen and Marshall (2016) to express intentions, 10 items assessed participants' acculturation tendencies towards migrants' cultures (e.g., "I want to participate in diverse cultural traditions"). All items were rated on a 9-point Likert scale, ranging from 1 (*strongly disagree*) to 9 (*strongly agree*).

Discriminatory Behavioral Intentions. Participants were asked to indicate their intended behaviors towards non-locals on a 10-point Likert scale ranging from "strongly

disagree" (1) or "strongly agree" (10) (Kauff & Wagner, 2012; e.g., "I would be reluctant to send my children to a school where the majority of pupils are migrants.").

Data Analysis Plan

To test our Hypotheses we conducted structural equation modeling (SEM) in AMOS 25. We used the sum of subscales as indicators for the respective latent variables with the exception of two scales: for DBI we used the observed variables; and for CAI, we parceled the items to increase the stability of the parameter estimates, following a factorial approach (Russell, Kahn, Spoth, & Altmaeir, 1998). Thus, items with the highest and lowest factor loadings were combined to create two parcels for the latent variable of CAI.

Results

Table 1 reports the descriptive statistics and Pearson's correlations. Intergroup contact and threat were significantly correlated with cultural adaptation intentions (CAI) and discriminatory behavioral intentions (DBI); hence, these variables were considered as potential mediators in the relationship between values and DBI/CAI.

Table 1

Means, Standard Deviations, Scale Range, Cronbach's Alpha Coefficient, and Person's Correlation Coefficients.

Variables	1	2	3	4	5	6
1. Growth						
2. Self-Protection	.29**					
3. Intergroup Contact	.33**	.03				
4. Intergroup Threat	-.24**	.18*	-.37**			
5. Cultural Adaptation Intentions	.43**	.10†	.45**	-.50**		
6. Discriminatory Behavioral Intentions	-.23**	.17*	-.43**	.71**	-.48**	
Scale Range	1-6	1-6	1-7	1-10	1-9	1-10
M	4.29	3.89	4.48	4.79	6.10	4.00
SD	.70	.73	1.25	1.60	1.45	2.45
α	.78	.74	.80	.89	.92	.88

Note. $^{**}p < .001$, $^{*}p < .01$, and $^{\dagger}p = .07$. Variance inflation factors ranged between 1.107 and 2.235.

Measurement Models and Structural Paths

Given that a chi-square test is sensitive towards sample size, we used multiple additional indices to assess model fit (Kline, 2016): the comparative fit index (CFI; should be greater than .90); the root-mean-square error approximation (RMSEA; should be smaller than .05); and the standardized root-mean-square residual (SRMR; should be .08 or less). Notably, based on the results of a preliminary hierarchical regression analysis with age, gender, occupation and ethnicity in Step 1, growth and self-protection in Step 2, and intergroup contact and threat in Step 3 (see Table A.1 in the Appendix), we included occupation and ethnicity as control variables in our SEM analysis. Moreover, to ensure DBI and intergroup threat as well as CAI and intergroup contact are independent constructs, we tested different measurement models for these latent variables with results confirming their construct validity (see Table A.2 in the Appendix).

We first tested whether our proposed parallel mediation model (Hypothesis 1, see Figure 2) showed a good fit to the data. Specifically, we tested whether *self-protection* and *growth* predicted intergroup contact and threat, which in turn was assumed to relate to CAI and DBI. We included ethnicity and occupation as control variables with direct paths to CAI and DBI into the model, using the dummy coded variables for occupation (see Table A.1 in the Appendix). A covariance path was included between residual variables for growth and self-protection, intergroup threat and contact, and CAI and DBI as well as between the error variables of occupation. As hypothesized, our model showed a good fit to the data with respect to the CFI and SRMR indices, $\chi^2(89) = 255.87$, $p < .001$, CFI = .93, RMSEA = .08 (CI = .07, .09), SRMR = .07. Kline (2016) himself, however, recognizes that the .05 threshold for RMSEA is debatable, given its sensitivity towards the degrees of freedom and sample size.

To provide further support for a parallel mediation model solution, we compared it against both single-mediator alternative models. Specifically, we first constrained the paths from *self-protection* and *growth* to intergroup contact to 0, and thus, controlling for contact, whilst testing intergroup threat as a single mediator. This single-mediator model revealed a bad fit to the data, $\chi^2(91) = 324.36$, $p < .001$, CFI = .90, RMSEA = .09 (CI = .08, .10), SRMR = .12. Similarly, when constraining the paths from *self-protection* and *growth* to intergroup threat to 0, and thus, controlling for threat, whilst testing intergroup contact as a single mediator, results showed a bad fit to the data, $\chi^2(91) = 346.14$, $p < .001$, CFI = .89, RMSEA = .10 (CI = .09, .11), SRMR = .13. Applying a chi-square difference test, both single-mediator models indicated a significantly worse fit to the data than the parallel mediation model, $\chi^{2\Delta}(2) = 68.49/90.27$, $p < .001$, respectively.

Parallel Mediation

For growth predicting CAI through intergroup contact and threat (Hypothesis 2), the standardized indirect effect was (-.84)(-.37)+(.62)(.34) = .52. To test for any simultaneous indirect effects, we conducted a bootstrap procedure with 95% bias-corrected confidence intervals (CI) from 1,000 bootstrap samples (Shrout & Bolger, 2002). The bootstrapped unstandardized indirect effect was 2.55 (*SE* =1.20) and significant, $p = .005$ [CI: 1.40, 5.48]. When examining the relationship between growth and DBI through intergroup contact and threat, the standardized indirect effect was (-.84)(.70)+(.62)(-.18) = -.70. Also as hypothesized, the bootstrapped unstandardized indirect effect was -1.19 (*SE* =.54) and significant, $p = .005$ [CI: -2.45, -.71].

For self-protection predicting CAI through intergroup contact and threat, the standardized indirect effect was (.68)(-.37)+(-.25)(.34) = -.34. The bootstrapped unstandardized indirect effect with 95% bias-corrected CI from 1,000 bootstrap samples was -.84 (*SE* = 1.25) and significant, $p = .01$ [CI: -4.12, -.07]; thus, results supported our Hypothesis 3. For self-protection predicting DBI via both mediators, the standardized indirect

effect was (.68)(.70)+(-.25)(-.18) = .52. The bootstrapped unstandardized indirect effect was .46 (*SE* = .62) and significant as hypothesized, p = .005 [CI: .04, 1.93].

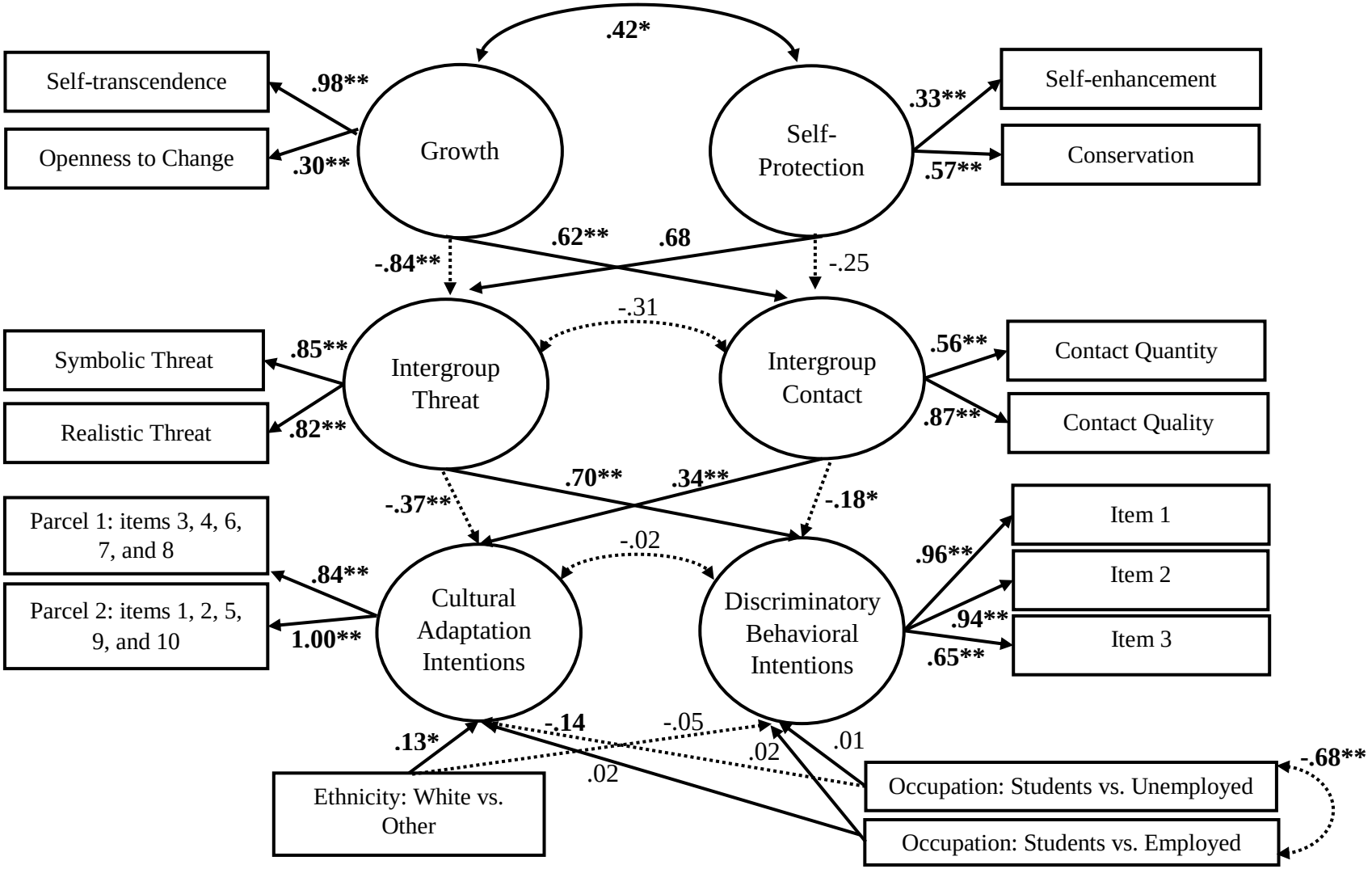

Figure 2. *Standardized Structural Path Coefficients and Measurement Weights*
Note. In bold: $p < .05$, $*p < .01$ and $**p < .001$. A straight line indicates a positive relationship and a dashed line indicates a negative relationship.

Discussion

The present study followed Hodson and colleagues' (2017) call to examine individual differences that are relevant to the contact-prejudice relationship to better inform contact interventions. In so doing, we combined intergroup contact research (Allport, 1954) with the motivational theory of basic human values (Schwartz, 1992) and Abrams and Eller's (2017) TIMICAT. Specifically, we proposed that the higher order values of *self-protection* and *growth* predict US Americans' cultural adaptation and discriminatory behavioral intentions (CAI and DBI, respectively) towards migrants' cultures in the USA through intergroup contact and threat, simultaneously. As hypothesised, US Americans who desired personal *growth* had more positive intergroup contact and less perception of intergroup threats, which in turn showed a negative association with their DBI and a positive association with their CAI. The opposite was true for US Americans high in *self-protection*.

Results correspond to the refined value theory (Schwartz et al., 2012) and previous findings (e.g., Álvaro et al., 2015; Sapienza et al., 2010) in that participants' personal value priorities underlined by the motivation for *growth* and *self-protection* guided their attitudes and behaviors towards migrants' cultures – that is, *growth* values encouraged the interpretation of diversity as an opportunity for stimulation and inspiration rather than a threat, relating to US Americans seeking for and positively engaging in intergroup contact, which in turn associated with the adaptation of migrants' cultures and negatively with DBI against them. Meanwhile, *self-protection* values fostered the interpretation of diversity as a challenge of established social norms and hierarchies, and thus as a threat, relating to US Americans' lack of seeking and positively engaging in intergroup contact, which in turn associated positively with their tendency in DBI towards migrants and negatively with their willingness to adapt to migrants' cultures.

These findings have several implications. Our results support Leong's (2008) model of majority group members' acculturation experiences in a US context as either an invasion, driven by *self-protection* values, or an enrichment, driven by *growth* values. Nevertheless, our findings support Schwartz's (1992) theory that the motivational compatibility structure of value relations also organizes relations among value-expressive behaviors. However, this relationship may be stronger outside of an US context given that cultural pluralism is considered as its traditional core tenet (Citrin, Sears, Muste, & Wong, 2001).

On the other hand, Rudnev and colleagues (2018) reported that values tend to be organized in line with the growth versus self-protection focus in more economically developed countries, suggesting its suitability for a US context. More generally speaking, whilst past research explored relationships between outgroup attitudes and behaviors with personal values individually (e.g., Sagiv & Schwartz, 1995) or in form of the traditional higher order structure (e.g., Feather & McKee, 2008), the present findings stress the relevance of considering alternative higher order structures that are most pronounced in a given context. In other words, our findings show that growth versus self-protection values constitute a relevant individual difference to the contact-prejudice relationship, and like personality traits and opposite to social attitudes (Duckitt, 2001), they may be a potential underlying motivational basis for prejudice in a US context (e.g., Cohrs et al., 2005).

Taken together, and in line with the individual difference literature (e.g., Jackson & Poulsen, 2005), values in general should be explored as predictors rather than moderators, given also their strong associations with more proximal indicators of real-world intergroup behavior tendencies than often investigated in contact research (cf., Pettigrew & Tropp, 2006). Specifically, their relation to US Americans' adaptation intentions towards migrants' cultures provides a relevant outcome component in times of growing cultural diversity in the USA (Cohn & Caumont, 2016). This research direction is fairly recent, and thus

underexplored within the contact (and acculturation) literature (Lefringhausen & Marshall, 2016). That is, researchers have investigated the relationship between majority group members' expectations of migrants' acculturation orientations (e.g., Sapienza et al., 2010) and endorsed intergroup ideologies (e.g., Callens, Meuleman & Valentova, 2019) as forms of majority group members' acculturation orientations in relation to intergroup attitudes and behaviors. Yet, their actual degree of personal change towards other cultures encountered in their own home country represents a novel approach in understanding intergroup relations with – as the present study demonstrates – fruitful implications for the contact literature.

Lastly, given the good fit of a parallel mediation model to our data, findings support Abrams and Eller's (2017) proposition to question the rigid positioning of intergroup threats as mediators of the contact-prejudice relationship. Likewise, it emphasises the need to include intergroup threats when inspecting the interplay of individual differences with such a relationship (e.g., Dhont et al., 2011) as well as that new models that integrate intergroup contact and threats research should not ignore the impact of individual differences (cf., Abrams & Eller, 2017). Practically speaking, intergroup contact opportunities should be enhanced for US Americans driven by *growth* whilst feelings of threat should be addressed for those driven by *self-protection*. Similarly, intercultural competence trainers could frame cultural diversity as a chance for personal development to those high in *growth*, and not as a challenge to existing social rules to those high in *self-protection*.

Limitations, Future Research and Conclusion

Firstly, we tested a complex model with a one country, cross-sectional convenience sample, and thus, results have to be interpreted with caution, especially with regard to generalizations and causal conclusions. Additionally, we employed Shrout and Bolger's (2002) bootstrapping procedure to test for indirect effects but other analysis methods for mediation (e.g., classical causal steps method) may come to different conclusions. Secondly,

inspecting values in higher order compositions may provide only a simplified perspective on a more complex interplay with the contact/threats-prejudice relationship. Thirdly, we cannot conclude whether our participants actively avoided and negatively participated in contact situations or whether they just lacked in positive encounters. Thus, future research should consider the influential power of negative and involuntary intergroup contact (e.g., Graf, Paolini, & Rubi, 2014). Lastly, although personal values may function similarly to personality traits as underlying motivational basis for prejudice, future research should analyze their predictive power simultaneously with other relevant individual differences (e.g., Kteily et al., 2019), whilst considering specific contextual factors that may determine whether such differences function as predictors or moderators (e.g., the extent of normative pressures; Bardi & Schwartz, 2003).

Nevertheless, the present study suggests a motivational explanation for majority group members' experience of cultural diversity, providing further insights into how to improve contact interventions. This is of particular relevance in times of growing migration numbers, and yet a simultaneous rise in anti-migration movements in the USA and beyond.

Ethical Compliance Statement

All procedures with our human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Moreover, informed consent was obtained from all participants included in the study. Lastly, the authors declare that they have no conflict of interest.

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Appendix

Table A.1

Unstandardized Coefficients for Hierarchical Regression Analysis showing Association of Demographic Variables, Growth, Self-Protection, Intergroup Contact, and Intergroup Threats with CAI and DBI

Variables		Cultural Adaptation Intentions			Discriminatory Behavioral Intentions		
		B	*SE*	*t*	B	*SE*	*t*
Step 1, *df*(5, 298)		R^2 =.07 , *F* = **4.25***			R^2 =.02 , *F* = 1.40		
Age		-.003	.01	-.42	.01	.01	.86
Gender (Male vs. Female)		.20	.17	1.16	-.36	.29	-1.24
Occupation[1]	S vs E	-.32	.25	-1.30	.61	.43	1.42
	S vs U	**-.88***	.32	-2.76	.44	.55	.79
Ethnicity (White vs. Other)[2]		**.13***	.05	2.87	-.09	.08	-1.15
Step 2, *df*(7, 296)		R^2 =.21, *F* = **10.90****			R^2 =.13 , *F* = **6.33****		
Growth		**.83****	.12	7.12	**-.97****	.21	-4.69
Self-Protection		-.09	.11	-.82	**.92****	.19	4.82
Step 3, *df*(9, 294)		R^2 = .41, *F* = **22.52****			R^2 =.55 , *F*= **39.43****		
Intergroup Contact		**.27****	.06	4.55	**-.41****	.09	-4.72
Intergroup Threats		**-.34****	.05	-7.23	**.94****	.07	13.68

Note. In bold: $p < .05$, $p < .01$,*, $p < .001$**. S: Students. E: Employed. U: Unemployed.

[1]Occupation was dummy coded, using students as the reference group coded 0. Students endorsed significantly more cultural adaptation intentions (M = 6.50, SD = 1.34) than unemployed participants (*M* = 5.58, *SD* = 1.63), whereas no difference was found with employed participants (*M* = 6.15, *SD* = 1.38).

[2]White participants endorsed significantly less cultural adaptation intentions (*M* = 5.99, *SD* = 1.44) than Other ethnic groups (*M* = 6.64, *SD* = .20).

Table A.2

Standardized and Unstandardized Coefficients for DBI, CAI, Intergroup Contact and Threat

	Latent construct	Observed variable	β	B	*SE*	*p*
Model 1a		DBI, Item 1	.94	1.00		
		DBI, Item 2	.95	.99	.03	***
		DBI, Item 3	.65	.59	.04	***
		Symbolic Intergroup Threat	.69	.38	.03	***
		Realistic Intergroup Threat	.69	.50	.03	***
Model 2a	DBI	Item 1	.94	1.00		
		Item 2	.96	.99	.03	***
		Item 3	.65	.59	.04	***
	Intergroup Threat	Symbolic Threat	.84	1.31	.09	***
		Realistic Threat	.83	1.00		
Correlation between DBI and Intergroup Threat			.81	24.85	2.65	***
Model 1b		CAI, Parcel 1	.85	1.00		
		CAI, Parcel 2	.99	1.17	.07	***
		Quantity of Contact	.37	.29	.04	***
		Quality of Contact	.49	.29	.03	***
Model 2b	CAI	Parcel 1	.82	1.000		
		Parcel 2	1.03	1.263	.097	***
	Intergroup Contact	Quantity of Contact	.61	1.000		
		Quality of Contact	.82	1.015	.144	***
Correlation between AI and Intergroup Contact			.58	10.63	2.01	***

Note. ***$p < .001$. CAI: Cultural Adaptation Intentions. DBI: Discriminatory Behavioral Intentions.

Model 1a: To test the relationship between indicators for DBI and intergroup threat, we first created one latent variable with all three DBI items and the symbolic as well as realistic threat subscale sums as its indicators. Using the fit indices as suggested by Kline (2016), this first measurement model fitted the data well, with the exception of the RMSEA score, $\chi^2(5) = 72.54$, $p < .001$, CFI = .94, RMSEA = .21 (CI = .17, .26), SRMR = .06.

Model 2a: When testing for a two latent variable solution including a covariance between the latent variables, the model significantly improved (see Model 2a), $\chi^2(4) = 9.04$, $p = .06$, CFI = .995, RMSEA = .06 (CI = .00, .12), SRMR = .02, $\chi^{2\Delta}(1) = 63.50$, $p < .001$.

Model 1b: To test the relationship between indicators for CAI and intergroup contact, we first created one latent variable with the two CAI parcels and both intergroup contact subscale sums as its indicators. Using the same fit indices as above, this first measurement model fitted the data not very well due to the high RMSEA and SRMR scores, $\chi^2(2) = 53.49$, $p < .001$, CFI = .91, RMSEA = .29 (CI = .23, .36), SRMR = .10.

Model 2b: When testing for a two latent variable solution, the model showed a very clear and significant improvement (see Table A.2, Model 2b), $\chi^2(1) = .24$, $p = .62$, CFI = 1.00, RMSEA = .00 (CI = .00, .12), SRMR = .004, $\chi^{2\Delta}(1) = 53.25$, $p < .001$.